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Emerging hybrid governance to foster low-emission rural development in the amazon frontier

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ABSTRACT

The Governor of the state of Mato Grosso in Brazil announced during the United Nations Framework Convention on Climate Change Conference of Parties, in December 2015, a plan to reduce considerably the state's greenhouse gas emissions–the Produce, Conserve and Include Strategy (PCI). Its governance structure - made up of members from the civil society, the private sector, and distinct government agencies - was planned to promote the integration of public policies. This article presents the building process of PCI strategic plan, questioning its innovation regarding former experiences in the state of Mato Grosso and its potential effectiveness in promoting low emission rural development agenda in Brazil's largest carbon emitter. It concludes that PCI has a great potential to consolidate innovative governance towards more sustainable and integrated strategies; however it does not intend to promote a politico-economic paradigm shift.

1. Introduction

The Paris Agreement, crafted during the United Nations Framework Convention on Climate Change Conference of Parties (COP) in December 2015, represented a historic international commitment to halt climate change. Parallel to the multilateral conference, several side events discussed the means of implementing the agreement in the subnational contexts. The state of Mato Grosso, situated in the Brazilian Amazon, is the largest single source of deforestation and related greenhouse gas emissions in the country and, in turn, is responsible for a significant share of global emissions. Marking a new moment in the state's climate agenda, the governor of Mato Grosso, Pedro Taques, announced a plan to promote low-emission rural development—the Produce, Conserve and Include Strategy (PCI)—as a commitment to reduce the state's emissions by 6 Gton of CO_2 by 2030.

The PCI's goals intend to assure the expansion and increased efficiency of agricultural production and forestry, the conservation of remaining native vegetation and restoration of deforested area, and the socioeconomic inclusion of family farming and traditional population (see Table 1). Later after the conference, in March 2016, the governor issued a decree (468/2016) for the instalment of a multi-stakeholder committee to oversee the implementation and monitoring of the PCI. The decree turned the PCI targets into an official public planning instrument, formally aiming at integrating existing policies and building on prior efforts to reduce deforestation, advance Forest Code compliance, meet sustainable supply chain commitments, build opportunities around REDD + [1], and promote social inclusion in family farming and indigenous and traditional communities. This governance structure, made up of members from the civil society, the private sector, and distinct government agencies, was based on the integration of public policies from formulation to implementation. The establishment of governance arrangements which includes private stakeholders is not a novelty in the state, as it will be presented hereunder. However, the PCI represents a broader agreement aimed at going beyond supply chain commitments or civil society councils.

This article presents the building process of the PCI strategic plan, questioning its innovation regarding former experiences in the state of Mato Grosso and its potential effectiveness in promoting the low-emission rural development agenda in Brazil's largest carbon emitter. The study initially describes the patterns of land use in Mato Grosso and contextualises the political environment of strategy formulation. Drawing on participant observation,[2] we then describe the interactions between divergent stakeholders in the definition of priorities. The last section discusses the PCI's institutional design, based on a trust fund, as

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[1] Reducing Emissions from Deforestation Forest Degradation.

[2] Contribution as an independent consultant (from January to July 2017) to the formulation of the PCI's implementation plan. The contract included interviews with key stakeholders, meetings with focus groups, participation in local events and meetings, review of state's policies and identification of private and public initiatives related to low-emission rural development in Mato Gross, identification of political demands from interest groups, and organisation of a workshop for elaborating the PCI's action plan with the participation of 83 representatives of public (state and federal) agencies, NGOs, social movements and private sector.

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Table 1
PCI Goals.

Produce	Conserve	Include
Beef cattle ● Recover 2.5 million ha of pasture areas of low productivity by 2030. ● Raise productivity from 50 to 95 kg/ha/year by 2030. **Agriculture** ● Expand areas of grains, in areas of degraded pasture, from 9.5 to 12.5 million ha by 2030. ● Raise production of grains from 50 to 92 Mton by 2030. **Native Forest** ● Expand area under sustainable forest management from 2.8 to 6 million ha by 2030. **Planted Forest** ● Raise timber production from 4.9 million m^3 to 11.75 million m^3 by 2030.	**Deforestation** ● Maintain 60% of native vegetal coverage. ● Reduce deforestation in the forest by 90m^2, having as reference a baseline of 5,714km^2 in 2001-2010 (PRODES) and reaching 571 km^2/year by 2030. ● Reduce 95% of the deforestation in the Cerrado, having as reference a baseline of 3,016 km^2 (SEMA) and reaching 150 km^2/year by 2030. ● Eradicate illegal deforestation by 2020. ● Conserve 1 million ha of those areas likely to be legally deforested. **Environmental Regulation** ● Register 90% of the rural properties (CAR) by 2016. ● Validate 100% of declared CAR by 2018. ● Recompose 1 million ha (100%) of degraded permanent preservation areas by 2030. ● Regulate 5.8 million ha (100%) of Legal Reserve, 1.9 million ha by reconstitution by 2030.	**Production and inclusion in the market** ● Expand technical assistance coverage and rural extension (ATER) of family farming from 30% to 100% of families by 2030. ● Raise participation of family farming in the regional market from 20% to 70% by 2030. ● Expand participation of family farming products in all institutional markets from 15% to 30% by 2030. **Land Regularisation** ● Perform land regularisation of 70% of lots of family farming by 2030.

Source: PCI Website.

well as its potential to reduce asymmetries in regional politics and to achieve practical results of reduced emissions and rural development. It is worth noting that the results discussed here refer to the strategy's elaboration and planning processes as it refers to an ongoing experience.

2. Current trends of land use in Mato Grosso and the window of opportunity for PCI

The state of Mato Grosso (Fig. 1) is Brazil's largest producer of grains and livestock and is a major centre of focus in the expansion of soy, maize, cotton, and cattle production (IpeaDATA, 2017). It is also the largest producer and processor of timber in the Amazon. Favourable market conditions, combined with private investments and credit

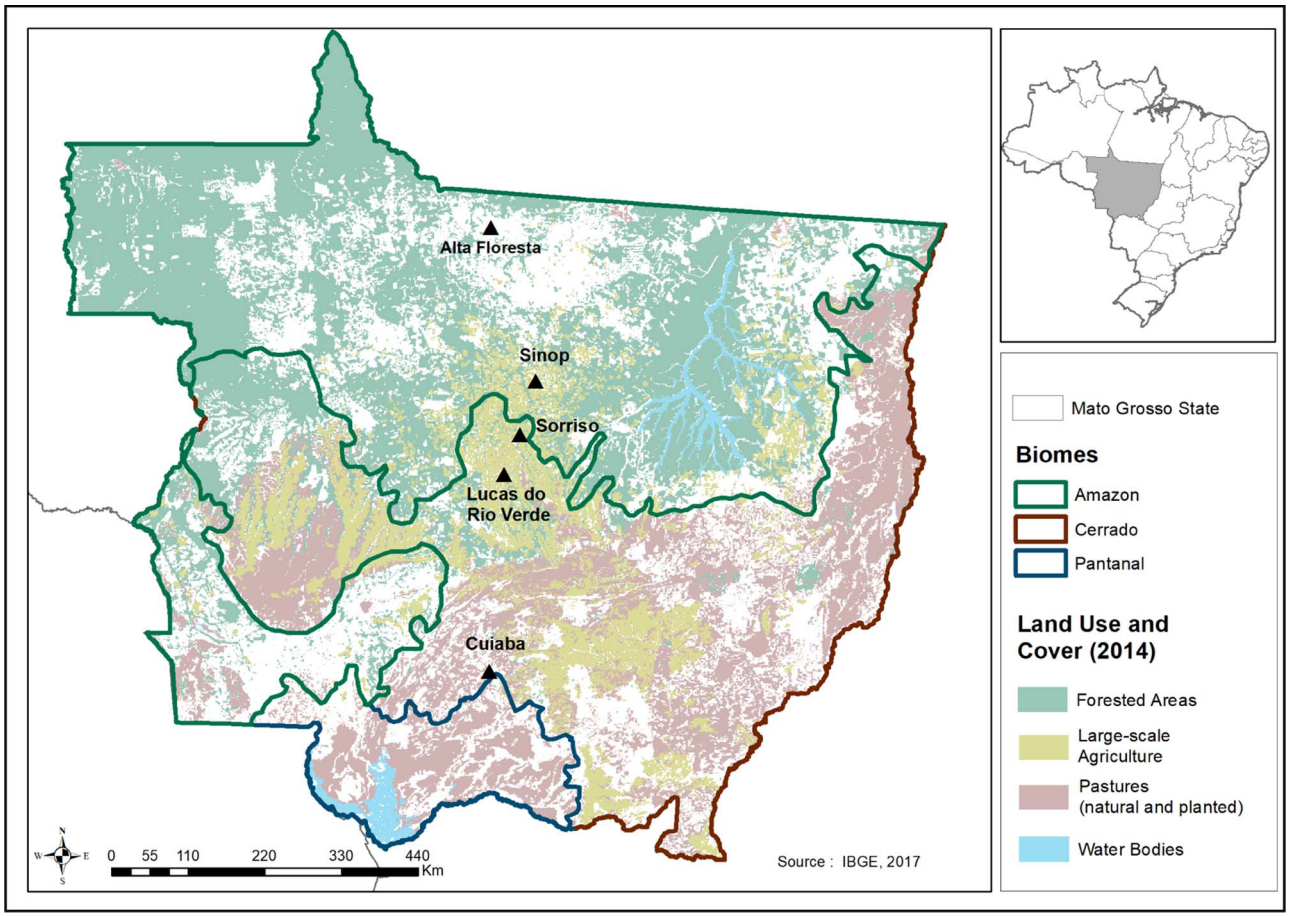

Fig. 1. Land Use and Cover in Mato Grosso (2014).
Source: Author' elaboration with IBGE data.

policies towards the agri-business sector have led to a substantial increase in agricultural production over the last decade, particularly in soybeans, which witnessed an average annual increase of 10% per year from 2000 to 2009 (Andrade et al., 2013). In 2016, Mato Grosso's estimated production was more than 14 million hectares planted and 2.7 million heads of cattle slaughtered, ranking it as the largest beef producer in Brazil (IBGE 2017).

Agriculture is the main economic activity in the state, with almost 70% of the GDP being related directly or indirectly to the primary sector. There are some notable features stemming from this expansion in the sector. Soy production centres in Mato Grosso—such as Sorriso, Lucas do Rio Verde, and Sinop—have become nationally renowned for their high gross domestic product and human development indices (UNDP and IPEA 2010; IBGE 2017). Likewise, commodities production in the state has contributed considerably to Brazil's surplus in balance of payments: in 2016, exports reached 12.6 million USD (with a surplus of 11.4 million USD), accounting for 7% of the total exports and almost 24% of Brazil's surplus (MDIC 2017). Moreover, recent increases in beef prices and the opening of market options by elimination of foot-and-mouth disease (*Aphthae epizooticae*) have added a significant economic force to pastures (Fearnside and Figueiredo 2016). The largest importers of Brazil's exports are China and the Netherlands, accounting for 31% and 8%, respectively,of the total amount of exports between 2011 and 2016 (MDIC 2017).

Parallel to this expansion of agriculture and livestock, large areas of Amazonian forests and *cerrados* (Brazilian savanna) have been converted into pasture and crop lands during the last few decades (Brando et al., 2013; Fearnside and Figueiredo 2016; Andrade et al., 2013). Soy crops and their related transportation infrastructure are the primary drivers of deforestation, but the conversion of crops into pasture areas has also led to the displacement of the production frontier into previously undisturbed forests in the state's extreme north and northwest. Besides forest conversion, the migration of ranchers to the northern frontier has exacerbated land tenure conflicts (Brando et al., 2013). According to Fearnside and Figueiredo (2016), indigenous people were displaced, followed by occupation either by small farmers or by ranchers. Logging has also been a major activity, which may occur in forested land held by farmers of any size.

Mato Grosso is home to a large number of family farmers, most of whom were settled in the region through public agrarian reform projects.[3] The state shows high income concentrations as these settlements are mostly excluded from the benefits of agricultural growth. The patterns of land tenure are also related to environmental degradation, together with the expansion of commodities production and logging, and their transportation infrastructure, as mentioned above. Recent studies showed that land tenure challenges are also related to environmental degradation as settlements are responsible for around 30% of deforestation in the Amazon region and 18% in Mato Grosso (Azevedo et al. 2016; Assunção and Rocha 2016). Although Mato Grosso is a major exporter of agro-food products, most of the food consumed in the state is procured from other states. Hence, the consolidation of regional markets could be fulfilled by family farmers who face significant challenges in selling their products. Market access is also a problem for non-timber forest products which represent an important driver for income increase in traditional populations and communities (Melo and Halla 2016).

In addition to the abovementioned environmental impacts and social challenges, climate change is also becoming a significant source of risk to rural development and agricultural production in the state. Climate models show that the Cerrado and part of the Amazon are Brazil's hotspots with respect to the negative effects of climate change. The former will likely experience significant loss of crops and biodiversity, and the latter will be the most impacted biome in terms of loss of native vegetation. There would be critical impacts on agriculture, with forecasts at more than 90% reduction in maize and 80% in soy production, primarily affecting Mato Grosso (Assad et al. 2016; Zanin et al. 2016). Drought events have become more and more frequent, causing fire-induced degradation (Brando et al., 2013). Producers' perceptions regarding climatic changes are varied and agreement with physical measured data is not always good, but in the deforestation zones, the downward trend of rainfall has already been perceived (Dubreuil et al. 2017). Finally, land-use changes are related to water quality and stream discharge, which in turn has impacts on agriculture and on populations' livelihoods.

Despite perceptions of a changing environment, politics in the state remained dominated by agribusiness interests, which normally consider the environmental theme as a threat to economic gains. However, according to Saito and Azevedo et al., 2017, since Blairo Maggi's governorship (2003–2010) – himself a major soy grain producer in the state–Mato Grosso has made some advances in line with ecological principles. The state implemented a monitoring system of deforestation, based on remote sensing imagery, which was intended to enforce the environmental licensing system for rural properties. Following the authors' argument, the agribusiness sectors aligned with Maggi promoted a reformist strategy by putting forward environmentalist proposals that contributed to maintain their hegemony. This move was possible because costs for producers were in the future. This strategy included convincing the public that the state forged consensus with other sectors of civil society, which were formerly opponents in the public sphere. It is worth noting that this strategic change was not endorsed by all agribusiness actors, particularly cattle beef producers who did not agree on the benefits of attracting more rigorous and exigent markets.

This strategy has apparently been followed by the Taques administration (January 2015 to the present), whose election campaign was centered around the narrative of dialogue with civil society and access to international markets. The governor was a public attorney, former senator of Mato Grosso for the Democratic Labour Party (PDT), and later affiliated with the Brazilian Social Democracy Party (PSDB), the main right-wing party of the country. He became famous as a public attorney in cases of environmental defence. However, his candidacy included an agricultural producer and agribusiness' representative as vice-governor. Taques' ability to circulate across different arenas contributed to his election and his propensity for dialogue appears to have given a boost to environmental NGOs that have seized the opportunity to advance their claims.

Interviews conducted by the first author in January/February 2016 with NGOs' representatives showed that they decided to unite their claims around a single agenda after the governor's critique regarding their lack of coordination. The 2015 Climate Conference became the window these groups needed to materialise their interest in presenting an ambitious strategy of deforestation control and sustainable production of commodities.

In this context, NGOs and think tanks, such as the Amazon Environmental Research Institute (IPAM), the Earth Innovation Institute (EII) and the Life Centre Institute (ICV), promoted a rapid identification and consolidation of the state's goals for emissions reduction. They contributed to outlining a first draft of the goals, based on their previous research. Then, these drafts were discussed in October 2015 during workshop sessions including government, NGOs, and private participants to reach a final strategy that was later approved by the Taques administration. These NGOs also funded a side event in Paris, from which they would secure the governor's official engagement in the PCI. The strategy achieved exceptional diffusion and succeeded in attracting not only the attention of international markets but also that of donors.

Variations in the political structure and in the mechanisms of

[3] A broad research led by the agriculture state secretariat (SEAF) and the Amazon Environmental Research Institute (IPAM) in 2017 identified over 125 thousand farms/properties in this category, which includes smallholder farmers, farmers living in public settlements, indigenous populations, and other traditional communities (quilombolas, extractivists, artisanal fishermen, etc.).

political processes are proposed by Tarrow (2005) as a response to the questions of why waves of movements emerge in some periods and not in others. Shifting political opportunities and constraints create incentives to take action. Therefore, despite the corporatism characterizing Mato Grosso's political environment, organisations with limited political resources could act together, in this case using known repertoires of action and responding to material and ideological opportunities. Consequently, on one side, the announcement in Paris contributed to endorsing a reformist strategy of agribusiness leaders in attracting recognition and showing international consumers that they could procure sustainable products in the state; on the other side, it created a political opportunity for environmental NGOs to consolidate a collective action. The consequences of this movement, apparently contradictory, will be discussed in the next sections.

3. Diffuse policy mix for low-emission rural development

Despite the international attention, by the end of 2015, the PCI was only a set of ambitious goals lacking an implementation plan. According to some promoters, the strategy should consider actions currently being implemented in the state, which would require more coordination and some form of prioritisation and allocation of investments in the territory (Bernasconi et al. 2016). Several public and private institutions were responsible for the implementation of an impressive number of initiatives which would contribute to attaining PCI's goals in several ways as a complex 'policy mix'. This will be briefly described in this section.

Andrade et al. (2013) describe a policy mix by setting a picture of multiple institutions engaged in actions which present some synergy but also sometimes conflict, and whose actions are noticeably dispersed. Besides state actors, private companies, NGOs, and social movements participated in these efforts, characterising what political sociology literature calls 'public action' (Hassenteufel 2011). This concept relies on the idea of a collective construction of public policies, led by diverse actors at multiple levels. It also sheds light on the limits of public programs in terms of their rationality and coherence. Recent literature in both public action and policy mix highlight the interactions of instruments and the policy processes by which policies emerge, interact, and have effects (Rogge and Reichardt 2016).

In the mid-2000s, the federal government set up the National Plan for Deforestation Reduction (PPCDAM in Portuguese), and more recently, it launched the National Plan for Climate Change (PNMC in Portuguese) with particular attention to land use change and forests. A strengthened effort of command and control was deployed in the Amazon region, including sanctions on producers, increased enforcement of environmental laws, improved monitoring, establishment of new protected areas, and incentives for anti-deforestation production practices (Brando et al., 2013). Moreover, as announced during the COP 15 in Copenhagen, in 2009, Brazil adopted a voluntary goal to reduce total emissions by 36.1%–38.9% compared to a business-as-usual scenario by 2020, with drastic cuts in deforestation-related emissions. In Mato Grosso, the government plan designed to prevent and control deforestation and fires contributed to a decline of 90% in deforestation between 2006 and 2015, below the average for 1996–2005 (PRODES/INPE 2017).

The state's environmental licensing system for rural properties inspired the national Forest Code, approved in 2012 (Law n° 12.651). Several private, civil society and international actors, including The Nature Conservancy, the German bank KfW, and the Mato Grosso Agribusiness Federation (FAMATO), have supported farmers with technical and financial means in the registry of their properties. The Amazon Fund, managed by the Brazilian Development Bank with international resources, also created a specific portfolio to reach this objective. Despite these efforts, 95% of deforestation in the state is illegal (not in accordance with the Forest Code). Furthermore, while deforestation has been declining in the Amazon biome since 2004, it has been growing in the Cerrado biome since 2011 (Sampaio et al., 2015).

Indeed, contradictory moves are still being made, such as rural credit programs, especially for cattle ranching, which stimulate deforestation. Moreover, income earned from the rise in commodities exports has strengthened Brazilian agribusiness actors' interests. This had effects on domestic politics followed by attempts from agribusiness lobbyists to undermine environmental legislation (May and Andrade 2014; Fearnside and Figueiredo 2016; Sampaio et al., 2015).

Furthermore, increasing pressure from global consumers on major conglomerates to reduce or eliminate operations from the sale of commodities associated with socio-environmental impacts and the decline in commodity prices worldwide have led agribusiness companies to maximise international markets access by creating mechanisms that exclude deforesters from supply chains (Brando et al., 2013). As described by Arvor et al. (2018), the agribusiness sector in the Amazon frontier started to review its economic model by signing private zero-deforestation agreements and by initiating a 'verticalisation' process intended to transform raw materials on site. This review included efforts for agricultural intensification which, despite its effects in decrease of natural landscapes conversion— – particularly the cattle ranching frontier (Macedo et al. 2012), also have effects associated, for instance, with increased use of pesticide and fertiliser (Schiesari et al. 2013). In this context, new agricultural practices respecting the basics of conservation agriculture have been promoted to initiate an ecological intensification process. This ecological intensification process is being supported through the implementation, since 2010, of the Low Carbon Agriculture Program (Programa ABC).

Regarding private agreements, soy products trading companies started not to fund or acquire soybeans from deforested areas as a response to the demands of consumers, establishing the Soy Moratorium in 2006. This type of agreement, based on voluntary commitments by companies, has proliferated in the commodities sector and produced significant effects in reducing deforestation according to literature (Rudorff et al. 2011). Even the beef sector, which is considered one of the major causes of environmental problems in the Brazilian Amazon (Rodrigues et al. 2017), is slowly starting to organise its supply chain through voluntary commitments. For instance, an agreement was reached by the main industries of the beef sector (Marfrig, Bertin, JBS) and the Brazilian Beef Association (ABEG), with a pledge not to buy animals from deforested lands or from properties with slave practices. In the meantime, a multi-stakeholder Working Group on Sustainable Cattle Farming (GTPS) was established as a member of the Global Roundtable on Sustainable Beef (GRSB), a transnational mechanism promoting the sustainability of the beef industry (Rival and Loeillet 2017).

Other multi-stakeholders' arrangements such as the Consumer Goods Forum have leveraged international networks, experience-sharing events, and pilot projects to encourage compliance with socio-environmental rules and to support companies to achieve zero net deforestation by 2020, with a special focus on Mato Grosso. This type of strategic alliance between governments, NGOs, and the private sector are combined with private mechanisms that represent a significant element of regulatory architecture relating to deforestation reduction (Guéneau 2009). Hence, according to literature on the Brazilian Amazon case, certification and other private governance mechanisms such as the Soy Moratorium[4] have contributed to reducing deforestation, but they still face strong criticism.

A major critique of these mechanisms is with respect to their inability to prevent the creation of '*islands of certified, sustainable farms or mills that produce or process a particular commodity embedded in a sea of unsustainable "business as usual" resource depletion and bad labour*

[4] The Soy Moratorium can be considered as a case of *voluntary agreement*, as defined by Jordan et al. (2003).

practices' (Nepstad et al. 2013, 642). Besides, certification mechanisms face challenges in achieving scale due to high costs of auditing individual farms and the low level of participation among main commodity buyers such as Chinese importers. As a solution, several NGO representatives in Mato Grosso have advocated for a 'jurisdictional approach for sustainability', which is recognised as a type of integrated landscape management with the landscape defined by policy-relevant boundaries and the underlying strategy designed to achieve a high level of government involvement. This approach would work as a low-cost territorial certification through monitoring of municipal indicators that identifies low socio-environmental risk jurisdictions for commodities procurement from international markets (Earth Innovation Institute 2017). The jurisdictional approach is based on a regional commitment and intends to integrate initiatives that are otherwise being implemented largely in isolation.

NGOs' representatives in the state also promoted the jurisdictional approach in other domains, particularly REDD+. This approach was seen as a means of channelling more rewards to forest guardians (such as indigenous peoples and traditional communities) from climate change mitigation strategies.[5] In parallel, the same NGOs supported the state government to elaborate a REDD+ policy framework whose first financial resources came from donors such as KfW. The jurisdictional approach was also promoted in the Sustainable Municipalities Program (PMS) (Bernasconi et al. 2016). It was launched in 2014 and inspired by the case of municipalities that were included in the priority list to hold off deforestation, based upon the restriction of public financial resources such as rural credit. This led to NGOs' and local governments' mobilisation around the program's goals of strengthening municipal environmental management, environmental and land tenure regularisation, and promotion of sustainable production chains with a focus on family farming.

Finally, in the family farming sector, the most important and recent initiative is the State Plan for Family Farming (PEAF in Portuguese). This was based on an unprecedented study held by the NGO IPAM and the agriculture state body (SEAF). In what concerns market access, the public food procurement initiatives such as the Federal Food Acquisition Program and those implemented by non-state organisations oriented towards non-timber products (such as the Xingu Seeds Network) are the main examples. However, these initiatives also lacked integration and weight in state politics.

As shown in this section, land use changes in commodity-driven economies respond rapidly to multiple forces, including global markets, international pressures for sustainable production, and policies at all levels. These forces can either encourage or discourage deforestation within a short time-period, as evidenced by the changes in Mato Grosso in the 2000s. The initiatives described here do not comprise all ongoing actions taking place in the state to promote low-emission rural development, but they summarise some of the main recent trends, including several organisations from multiple sectors. However, most of these initiatives are implemented with different funds and based on different action plans. In such a diverse environment, one of the objectives of the PCI was to precisely establish a common platform of integration of stakeholders and agendas for rural development. This should be able to deal with the diversity of interests, degrees of power, and institutional arrangements existing in the state.

[5] REDD+ initiatives were mostly based on the project-based approach rather than territorial or integrated strategies. This is argued to penalizes forest guardians as low-performers in terms of reducing emissions. Besides, under the project-based approach, only a few communities or farms benefit in the schemes which are restricted to indigenous territories or farms, and emissions are small in scale. Under the jurisdictional model, entire jurisdictions would be rewarded for reducing emissions and investments flowing from climate finance could have positive effects on a range of development aspects such as health, infrastructure, and broader communities' needs (Earth Institute Innovation, 2016).

4. Policy integration as a political process: the PCI's stakeholders and agendas

According to one of the first documents elaborated in the PCI strategy, the PCI's main objective was to integrate policies oriented towards deforestation reduction, productivity increase, and income generation for family farming (Corsini 2015). The PCI is not the first attempt to promote policy integration in the state. Initiatives such as the Mato Grosso Agro Forest Program (Prodeagro - 1993), funded by the World Bank, was one of the first experiences, supporting integrated actions aimed at environmental protection and economic development. The Deforestation Control Plans mentioned above (PPCDAM - 2004) also constituted important actions towards policy integration, bringing together 14 ministries of the Brazilian government at the federal level.

Recent literature considered policy integration as a process of governing, based on day-to-day policy-making and on specific approaches, strategies, and policy instruments (Adelle and Russel 2013). Rogge and Reichardt (2016) also agreed on the idea that coherence and consistency are actually associated with political challenges such as path dependence and lock-in, resistance, conflicting interests and tensions, and fragmentation of policy-making. Drawing on this literature, we consider policy integration as a political process that goes beyond the combination of interacting instruments. Therefore, the PCI's ambition of integrating public and private instruments to promote low-emission rural development includes organisational and processual efforts, but it essentially refers to negotiation/mediation efforts towards conflicting interests in policy-making (Table 2).

Combining environmental conservation, economic growth, and social progress implies the conciliation of interests that are commonly opposed in practice. This is particularly true in Mato Grosso, where agribusiness expansion and forest conservation have commonly been seen as opposing forces. Hence, integrating these objectives becomes more of a conflict-management effort rather than mere coordination. In this context, the design of the implementation plan of the PCI strategy followed a process of engagement and negotiations with local stakeholders. The decree formally establishing the PCI (n°468/2016) instituted a committee with the role of a consultation board. The committee's coordination was assured by the Strategic Affairs Office (GAE), in line with three sectoral secretariats (Environment Secretariat–SEMA, Economic Secretariat–SEDEC, and Family Farming Secretariat–SEAF). These government bodies joined the committee board with several other representatives from NGOs, private companies, and agribusiness' associations (see Fig. 2).

The decree also specified the need for an executive directorDirector, who would be chosen by the committee through an election process and would be in charge of operationalising the board's decisions, raising funds, and building partnerships. This led to the first conflict between the different actors represented in the PCI arena. One of the main idealisers of the strategy and the director of a recognised NGO in the state stood for election for the executive director and gathered major support from NGOs and from the Environment Secretariat (SEMA). Her name was considered practically accepted, but agribusiness representatives protested against the possibility of the PCI turning into a conservationist strategy and threatened to leave the table.

Then, another candidate with a professional background in the beef sector was invited to participate in the election. He won the election, having become the agribusiness sector's candidate, with support from some government representatives, particularly in the Economic Secretariat (SEDEC), and think-tanks such as Agroicone. Despite his experience as the former president of Brazil's Working Group on Sustainable Cattle Farming (GTPS), the NGO group considered the election deceitful. The executive director was hired by the Sustainable Trade Initiative (IDH), an organisation based in the Netherlands, supported by multiple European governments and working to stimulate sustainable commodities trade based on a jurisdictional approach. In Mato Grosso, IDH signed a memorandum with the state government to

Table 2
Main factors leading the PCI facility creation and its potential contribution to policy integration.

Political factors:
● Window of opportunity to launch the PCI and international visibility.
● Strategic planning as a negotiation process, crucial in a context of divergent priorities, interest, ideologies and power asymmetries.
● Perceived gains in market access by some agribusiness' stakeholders and proposal of economic incentives by public agencies to promote more sustainable supply chains.
● Shared costs and risks of implementing the PCI.
Institutional/organisational factors:
● Proposal of allocating budgets to cross-cutting issues rather than to conflicting sectors.
● The PCI Facility as a means of promoting long-term objectives rather than initiatives dependent on election cycles.
● Potential to establishing standardised procedures, allowing for greater supervision and maintenance of an orderly and reliable pattern of resource flow.
Process/management/instrumental factors:
● Establishment of a strategic policy framework (the strategic plan) to ensure that sectoral policies are consistent with the PCI objectives and priorities.
● Establishment of the PCI facility, making the implementation procedures more flexible and less bureaucratic.
● Promotion of a systematic inter-sectoral dialogue, involving all indispensable actors.
● Increase of transparency and trust in an environment of poor historical relations between stakeholders.

Source: Adapted from Stead and Meijers' (2009) framework.

significant fiscal deficit, prompting administrative reform. Therefore, for the NGOs, the election of an executive director they did not support and the slow pace of PCI's implementation led to mistrust of the government's commitment. Besides, several agribusiness representatives who were interviewed informed that they had not fully participated in the definition of the goals, which were considered too ambitious. At the start of every meeting, these representatives frequently, as a dissuasion tactic, called attention to the high cost of implementing each PCI target and asked who would pay for it. Agribusiness representatives also threatened exiting the strategy if it appeared to become a conservationist doctrine

In such a challenging context, the planning exercise first relied on consultations with the committee's members and other stakeholders in order to identify their visions and concerns. However, an important result of these meetings was the dissemination of information about the strategy, which was barely known by technical staff of associations and government. It was perceived to have been elaborated at high levels. Hence, improved dialogue, dissemination of information, and transparency concerning the process were key elements of these first steps. These were considered important by mediators to reduce mistrust among stakeholders and increase their involvement in the process.

Further, the three PCI pillars (Produce, Conserve, Include—see Table 1) were associated with a particular politico-economic group in Mato Grosso and their dynamic had been reproduced in the initial PCI

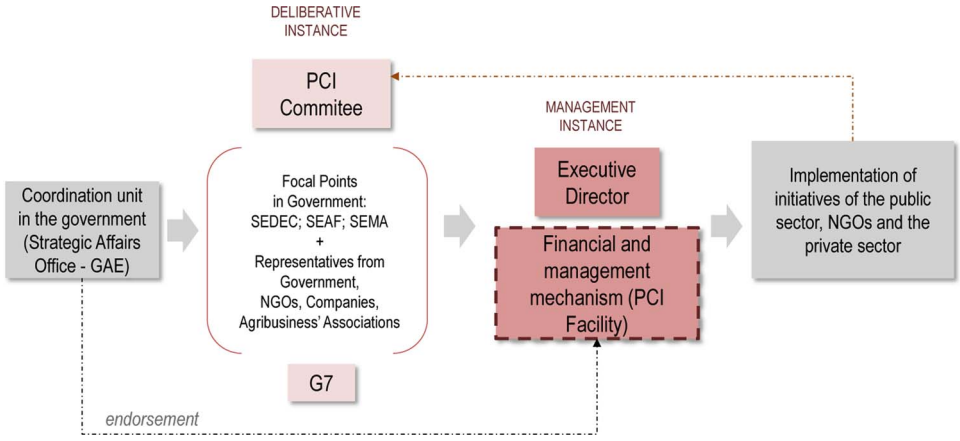

Fig. 2. PCI Governance Structure.
Source: Adapted by the authors from the PCI Action Plan.

support and strengthen the PCI's governance.

IDH also funded a consulting firm[6] to contribute to the development of a strategic plan. This firm was headed by the former executive director of the Brazilian Biodiversity Fund (FUNBIO), a non-profit organisation contributing to the implementation of environmental policies in Brazil. The consultancy became a sort of outsider mediator in the planning process as its members were not directly involved in Mato Grosso's political environment and projects. Moreover, it is worth noting that PCI was conceived not only as a public-private action plan but also as an institutional body similar to FUNBIO, whose decisions and implementation process would be not dependent on government. This institutional framework will be detailed in the next section.

In addition to the challenges faced during the PCI's launch and election of an executive directorDirector, the planning process also faced the demobilisation of key stakeholders. After more than one year since its announcement in Paris, few concrete steps have been taken. The national political and economic crisis that hit Brazil in 2015 had an important impact in Mato Grosso, and the government confronted meetings. Hence, building bridges between the groups was necessary, and it was achieved by the emphasis on shared interests and challenges between these groups and through the identification of key cross-cutting themes across the pillars. These cross-cutting themes included: i) financing mechanisms (to increase access to credit and to compensate producers for conservation measures); ii) environmental compliance and forest restoration (registry and validation of rural properties and restoration of degraded areas); iii) land tenure regularisation (enabling conditions for market stability); iv) regional and social-biodiversity markets (opening markets for family agriculture and non-timber forest economy); v) added-value and international markets (offering guarantees of sustainability and goods practices to the global consumer market); vi) technologies and best practices production and diffusion (increasing productivity and reducing negative impacts through innovation and promoting low-carbon economy).

Finally, as a policy integration initiative, an additional planning step was to combine some of the stakeholders' common interests with the most innovative and broad initiatives being implemented in the state on a comprehensive list of actions organised across these key cross-cutting themes. Such initiatives were prioritised by the 83 stakeholders during workshop sessions held in May 2017. The result was the approval of an implementation plan for PCI targets and priority was

[6] The first author participated in the planning process through a consulting contract with this firm.

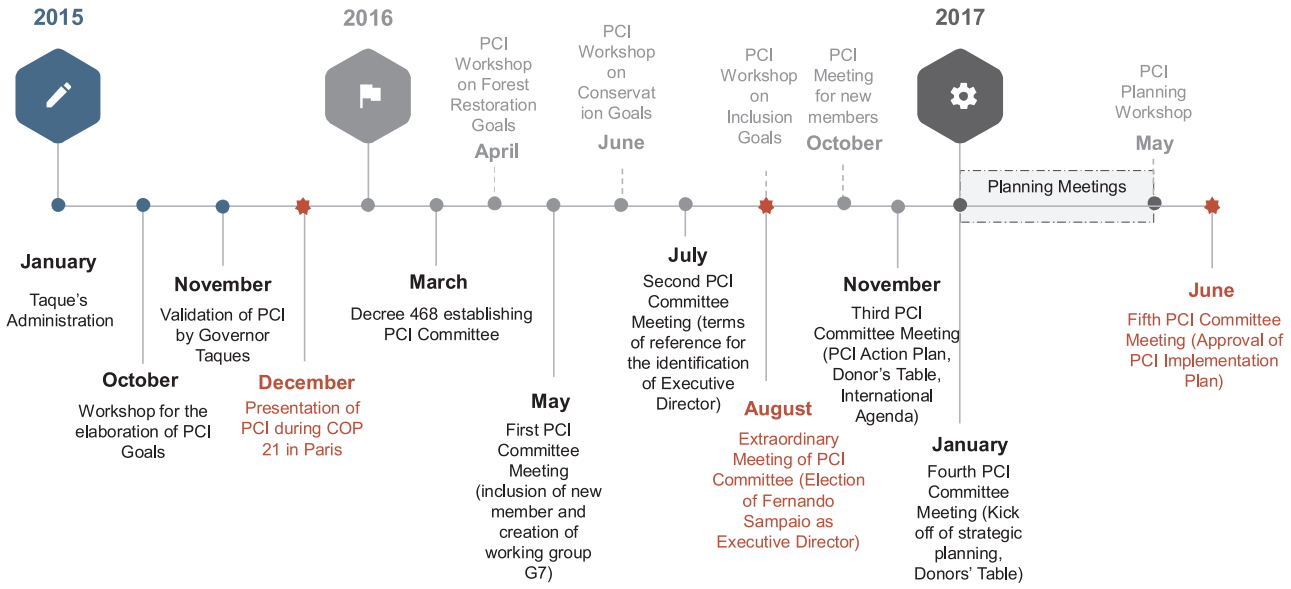

Fig. 3. Timeline of PCI Elaboration and Planning Process.
Source: Elaborated by the authors.

given to the creation of a facility to implement the plan during the committee meeting in June 2017 (see Fig. 3).

An interesting side effect of this process was the importance that some agendas which were misrepresented in the PCI kick-off acquired during these negotiations. Although indigenous groups did not directly participate in the elaboration of the PCI or in its planning process, international actors such as KfW contributed to reinforcing an agenda of protection of traditional communities' livelihoods and their rights. The promise of funding a wide-ranging REDD + initiative directed towards smallholders and indigenous populations in Mato Grosso contributed to increasing interest around this subject during the process. Until mid-2017, only IDH had covered the financial costs of the PCI's implementation. Most donors were interested in funding projects once the strategy and its facility became operational.[7] Hence, KfW's concern of funding not only REDD+ projects but also the building of the PCI's institutional structure was seen by the PCI committee's members as a major opportunity to be seized. This contributed to reinforcing the discussions about the inclusion of traditional communities in the strategy.

The PCI also contributed to shedding light on the ongoing process of elaboration of a family-farming plan (PEAF). This was considered a novelty in the 'state of agribusiness', being led by the Family Farming Secretariat (SEAF) with support from the NGO IPAM. Given the importance of the plan to a sector which had been historically misrepresented in Mato Grosso, the PCI's inclusion targets have been directly associated with this plan, contributing to giving it more visibility outside activists' and family farming organisations' spheres.

However, despite the reinforcement in the planning process of such agendas, the involvement of distinct interest groups around a common political framework in PCI has already shown some of its limits. Groups such as the agrarian social movements did not find their place in the strategy. Although some of them—particularly the Mato Grosso Forum for Environment and Development (Formad)—agreed to participate in the planning workshops, most of their claims were rarely represented in the final plan, especially those regarding the ban of pesticide and fertiliser use. Other NGOs such as OPAN (*Native Amazon Operation*) have chosen to be involved only in monitoring PCI activities. This role was confirmed by informal talks, and it was financially supported by international donors such as the Climate and Land Use Alliance, a Ford Foundation body.

Moreover, during workshops and committee meetings, a recurrent debate was the place of 'command and control' actions in the strategy. Locally-based NGO representatives continuously stressed deforestation control as the main goal of the PCI, highlighting its role in supporting the enforcement of environmental laws. On the other hand, most agribusiness representatives strongly refuted this emphasis, highlighting particularly the agenda of incentives and market access as well as their rights granted by the Forest Code of clearing private forested areas. By recognising these challenges as the reality of politics in the state, the negotiation processes were mainly oriented towards reaching consent regarding individual issues rather than a consensus around the whole strategy and its theory of change.

5. The PCI Facility: policy innovation or reproduction of old receipts?

The governance structure proposed for the implementation of PCI, as presented above, is one of its main innovations, and this requires further discussion. The creation of a financial and management mechanism—the 'PCI facility'—was the most prioritised recommendation during planning workshops in May 2017. According to the first draft, its functions would include: i) integration and coordination of initiatives and stakeholders; ii) knowledge production and management; iii) support to fund-raising and asset management; iv) support to programs and projects; v) promotion of communication, transparency, and engagement of stakeholders.[8] The PCI facility was conceived to contribute to the coordination of initiatives and to enable the capture, management, and application of financial resources for the implementation of the strategy rather than to directly implement actions. Besides, its conceptual notes made the point that the recommended institution would not represent a new third sector organisation whose aim is to compete for international resources alongside other NGOs.

The proposal of this institutional model may be associated with experiences in the late 1980s and early 1990s of consolidation of a neoliberal ecological modernisation. In the policy sphere, this cognitive frame manifested itself through recommendations of privatisation and arguments regarding de-skilling of government functions. It coincided

[7] Mato Grosso's Produce, Conserve, Include (PCI) Strategy - Executive Secretariat - Action Plan – January 2017.

[8] Implementation Plan for the PCI Strategy – July 2017.

with the emergence of environmental policies in several countries, including Brazil, and with a pervasive concern in environmental global conferences about the efficiency and legitimacy of financial intermediaries working in the field (Oleas and Barragán 2003). Another common concern of international donors and stakeholders of the global environmental governance regarded the lack of long-term investment in conservation, which has been considered a key limitation to the success of numerous interventions (Bonham et al. 2014).

In this context, a set of instruments such as environmental funds, market mechanisms, and public-private governance structures, were commonly proposed as a means of filling gaps in governance and public services. This setting gave birth to environmental funds in Latin America, which have acquired multiple roles including implementation of national strategies. Their governance structures may vary, but mostly they equilibrate private, public, and civil society participation in their boards of directors (Oleas and Barragán 2003). The Brazilian Biodiversity Fund, as mentioned earlier, was one of the pioneers in Brazil and its fund-like model and institutional configuration independent from governmental structure inspired some of the PCI key stakeholders, as we could apprehend from interviews and interventions during the planning workshops.

In order to analyse the PCI institutional structure as innovative or not, we contextualise these public-private environmental mechanisms in Mato Grosso's political setting and review some of their already known limitations, questioning if the PCI may be able to respond to the listed challenges. A summary of the factors leading to the creation and potential contribution of the facility to policy integration is presented in Table 2, below.

First it is worth noting that private mechanisms are commonly driven by the idea that governments are not capable of addressing problems caused by globalisation (Cheyns et al. 2017). However, in Mato Grosso, this phenomenon did not reflect the decline of the State's authority. The corporatist state described in the first section of this article reflects dense interactions between private and government actors. For instance, the dissemination of private sustainability standards has been proactively promoted by the state's government in order to obtain competitive advantages or to ensure access to markets. At the same time, when it came to PCI, the state's government was not inclined to fully involve itself in implementation and funding.

Second, market mechanisms and certification roundtables, which are considered by private stakeholders as an important aspect of PCI's strategy, have been criticised in the literature for their inability to accommodate plural categories of participants (Cheyns et al. 2017). In a continuing effort to minimise dissent, debates have been framed in a way that restricts final results to those measurable and accepted by the market, rather than a substantial discussion on the very content of sustainability. This reveals a process of de-politicisation of the debate and action. Within the context of the PCI, this was evidenced by the awareness of activists regarding the expansion of monocultures and the use of pesticides and genetic modified seeds, which were not truly addressed in negotiations. In this sense, one may not consider the PCI as a driver of paradigm shift concerning production models and land-use in Mato Grosso state.

Third, jurisdictional commitments have already been evaluated in Pará state (the northern frontier of Mato Grosso): according to Viana et al. (2016), local policy-makers, together with the rural elite, transformed the crisis generated by the federal 'red list' restricting credit to municipalities with high rates of illegal deforestation into an opportunity to shift the rural economy on a path towards more legalised large-scale agriculture. By aligning production and conservation objectives, the Green Municipalities program, launched in 2011, attracted medium and large landowners but also failed to prevent the further marginalisation of smallholders in the agrarian transition in the region. Hence, these efforts were not considered sufficient by themselves to promote sustainable territorial development. This lesson has already been incorporated by the Sustainable Municipalities Program in Mato Grosso and by the Territorial Performance System (proposed by EII as an approach to PCI implementation). Both include criteria other than deforestation reduction to consider a territory as sustainable, such as the existence of land regularisation targets and mechanisms of socio-environmental governance.

The Sustainable Municipalities Program has been promoted by NGOs in Mato Grosso as the operational arm of the PCI, that is, the PCI's concrete connection to the field (Bernasconi et al. 2016). It is worth noting that this program (presented in Section II) emerged in the same context of the Green Municipalities Program. However, their building process largely differs, as the Mato Grosso experience was built on local meetings including smallholder farmers. It is interesting to highlight that the Sustainable Municipalities Program was strategically oriented to the local sphere, lacking regional agreement, and the involvement of private actors. Having been launched before PCI, it did not promote an international projection, which assured PCI fund raising. Lastly, it did not show an institutionalisation process capable of assuring political stability to the strategy. These probably contributed to reducing its political weight once the governor that launched the initiative was replaced in 2015.

Fourth, another distinct aspect of the PCI's framework involves the gradual move from 'command-and-control' state regulatory solutions towards private and market-based solutions that would benefit specific economic sectors. This move has been noted in the PCI's strategic planning process, as already described in the section above. It is also based on the argument that enforcement alone may be insufficient to fight deforestation as the Brazilian Amazon is a vast area and monitoring it involves excessive costs for the government (Rodrigues et al. 2017). Furthermore, Ciplet and Roberts (2017) evoke the prominence of the principle of transparency as a central component of this style of governance. This characteristic, in the case of the PCI facility, was also proposed given the fact that international donors usually require a solid governance structure for decision-making and a transparent administrative body for the execution of non-reimbursable resources. However, few frameworks fully embrace transparency in practice, or do so in political contexts in which certain ideas and forms of transparency take precedence over others.

Finally, according to Ciplet and Roberts (2017), the contemporary global climate regime has institutionalised neoliberal modernisation reforms, but as a process shaped by competing political coalitions, it has not followed a linear or predictable path towards neoliberal forms of governance. The same argument stands for the local translation of this regime by PCI mediators. Given that the PCI is implemented in a political reality characterised by contestation and strategic concessions, the process has not been linear. The strategy was elaborated and launched by civil society actors opposed to the agribusiness sector in the state; hence, the conflict between distinct development projects has shaped the strategy since the beginning. At the same time, the planning process and the proposal of its institutional framework contributed to increasing transparency concerning PCI's goals and initiatives and to mediating the achievement of consents without open disputes in an environment historically marked by conflicts and mistrust.

Despite the risks related to private governance mechanisms evoked above, several innovations from the PCI are worth highlighting. These include its comprehensive multi-stakeholder agreement, long-term vision, and its international projection. The first one relates to the establishment of a more participative and less asymmetric governance structure where no sector prevails. This could be positive for groups with lower political and economic power. In a context where connections between government and agribusiness have been historically dense, this framework provides NGOs', family farmers', and indigenous organisations with an opportunity to strengthen their participation in decision-making processes.

Second, the facility's vision has the ability to ensure long-term stability of targets in a political context which is highly dependent on election cycles—and, we could add, dependent on corporate interests

which are strong enough to endorse the flexibilisation of social and environmental rules. Third, the structure encourages leveraging resources (through matching schemes) by mobilizing additional private and international sources of funding. The predictability and optimisation of resource allocation as well as its capacity to transparently capture and channel different modalities of resources are highly valued by donors and investors. The attraction of international actors may also contribute to reinforcing agendas which are misrepresented in the state's policy landscape, as described in the case of REDD+ and the indigenous communities.

6. Conclusion

The PCI was elaborated as an instrument for fostering a rural development model which promotes reductions in greenhouse gas emissions, while increasing crop and cattle production, securing land rights for family farming, and restoring deforested areas. It has the potential to enable transition from an economy based on agricultural frontiers to one that is more sustainable and territorially-integrated. However, the broad nature of the agreement limits the facility's opportunities to create a paradigm shift towards sustainability, as some aspects—such as the use of fertilisers and pesticides—have not even been addressed. The PCI also carries a set of risks which are associated with private/public-private governance mechanisms, including predominance of sectoral rationales, increased emphasis on private interests and local elites, selective transparency, and 'greenwashing'. These aspects should be taken into account by the PCI committee during implementation process.

However, despite a conservative stance on a number of subjects, the PCI could still emerge as a source of policy change and policy innovation in Mato Grosso. As detailed above, these include its comprehensive multi-stakeholder agreement, an institutional structure thought to provide long-term continuity to the strategy, and its international projection. In addition, the PCI may contribute to the integration of disconnected policy instruments and to the identification of synergies among them deriving from negotiation strategies between conflicting actors and agendas. Such a negotiation process was based on individual and collective consultations and on the diffusion of information among technical and political stakeholders, which worked as means of assuring transparency, a trusted environment, and stakeholders' involvement in the process. It also included an analysis of the institutional environment in order to identify blockage points and fragmented arenas, as well as shared challenges and claims among conflicting actors. This information was compared with the current public and private initiatives in the state, resulting in a first list of actions that went through an open exercise of prioritisation.

All of the above contributed to bringing distinct and competing political actors together around a progressive and long-term sustainable development plan. This positions the PCI with the potential to support regulation of social and environmental dimensions in agricultural development. With respect to the private sector, PCI offers a platform to identify potential business cases and lower risks of sourcing by international companies and traders in Mato Grosso, which would contribute to the expansion of market access for the producers based in the state. For NGOs and family farming associations, PCI provides a less asymmetric arena of debate and a space for raising funds while offering their agendas higher visibility International donors are assured more predictability and optimisation of resource allocation, ensuring coherence between their investments and regionally- agreed development plans.

These characteristics by themselves do not lead to linear or predictable path towards corporatist forms of governance favouring agribusiness local elites. The reality of national and regional politics will shape the process and its achievements. Undoubtedly, a certain degree of inconsistency and incoherence may be expected, due to the complexities involved in addressing sustainability challenges, conflicting objectives, and mutually exclusive interests, but these may also represent a source of further policy innovation. This experience confirms the argument of Arvor et al. (2018), according to whom Mato Grosso may further remain in the leading edge of the experimentation of innovative governance models in the tropics.

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